

REMARKS

CLAIM REJECTIONS – 35 USC 103

The Examiner has rejected Claims 49, 54-56 and 58 as being unpatentable over Matsumura in view of Okumura. Applicant respectfully traverses the Examiner's rejection in view of the following

The invention set forth in the pending Claims allows for a highly efficient and intelligent encoding technique. One of the reasons for this success is that, unlike in prior systems, the current invention supports several coding mode choices. The individual choices – and certainly the combination thereof – are not taught or suggested by the prior art. Moreover, the invention takes account of the fact that sometimes it is preferable to transmit a motion vector, whereas at other times it is preferable to transmit a coding mode. An added benefit of having the ability to switch between the various coding methods set forth in the Claims is that the codec is highly tolerant of irregular motion fields.

The Examiner cited Matsumura (figures 4-8, column 9, line 15-40; column 11, line 54 -- column 12, line 15) as teaching the step of "using motion vector calculated above" and "transmitting a vector from (a) only when it is the choice of coding mode selected".

In response, Applicant submits that Matsumura does not teach or suggest the step of "transmitting a vector from (a) *only when it is the choice of coding mode selected*" – as set forth in Claim 49. The cited excerpts of Matsumura are directed to a method of choosing macroblocks within a picture to be refreshed and do not teach or allude to "transmitting a vector from (a) *only when it is the choice of coding mode selected*." That is, the cited art does not teach that a motion vector is transmitted only when it is the choice of coding mode selected –

and when the motion vector from (a) is not utilized – no motion vector is transmitted at all.

The Examiner cited Okumura (column 2, line 50-55 and column 4, line 1-29) as teaching the step of "using an algorithm to select at least one motion vector from a predetermined set of prior coded blocks that are less than n blocks away from a current block".

In response, Applicant notes that the Examiner did not quote the full clause from Claim 49, which states "using an algorithm to select at least one motion vector from a predetermined set of prior coded blocks that are less than n blocks away from a current block **where n is greater than 1.**" The limitation "where n is greater than 1" is significant, as the prior art does not teach the use of a motion vector which is *more than* one block away from a current block

More specifically, Okumura teaches the use of motion vectors from above and left blocks to form a predicted motion vector. All blocks are at most one block away from the current block, which is in contrast with what is claimed in Claim 49 (step b) – "where n is greater than 1."

In addition to the above, the cited reference, either individually or in combination, do not teach or suggest the step of "selecting a coding mode... from a list of coding modes comprising at least the following choices", where at least three different coding modes are given.

Moreover, the cited references, either individually or in combination, do not teach or suggest a method of choosing when to transmit a motion vector and when not to transmit a motion vector – as is set forth in Claim 49. Claim 49 (steps c and d) discloses a method of determining when to transmit *only* the encoding mode (i.e. not transmitting the motion vector) and when to transmit both the encoding mode and the related motion vector. Such improvement in coding

efficiency is made possible by the intelligent design of a list of "coding modes" and the method of only transmitting motion vectors for one mode and not the others. This is nowhere taught, suggested or disclosed in the prior art.

Applicant further submits i) that the encoding modes set forth in the Claims are not taught by the prior art and that ii) it would not have been obvious to transmit a choice selected from a list of modes and to use a motion vector without encoding/transmitting the motion vector. Given that the individual modes are not taught by the cited art – they could not be combined to produce the invention set forth in the Claims. Applicant therefore submits that it would not be obvious to one of ordinary skill in the art to develop the intelligent list of modes and allow for the adaptive selection of one.

In view the above-mentioned individual novel steps and in view of the novel method of choosing when or when not to transmit a motion vector, Applicant believes that cited art is clearly distinguished and the application is in condition for allowance.

Should the Examiner not be fully convinced that the cited art is distinguished or should the Examiner require any clarification, the Examiner is kindly request to call the undersigned before issuing a final action.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'T. Rotberg', with a stylized flourish at the end.

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